(19) World Intellectual Property **Organization**

International Bureau



(43) International Publication Date 2 June 2005 (02.06.2005)

(10) International Publication Number WO 2005/049852 A2

(51) International Patent Classification⁷:

C120

(21) International Application Number:

PCT/US2004/038363

(22) International Filing Date:

17 November 2004 (17.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/523,232

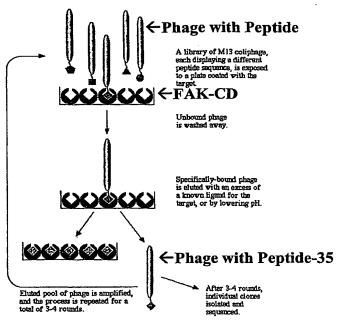
17 November 2003 (17.11.2003)

- (71) Applicant (for all designated States except US): UNIVER-SITY OF FLORIDA [US/US]; 223 Grinter Hall, P.O. Box 115500, Gainesville, FL 32611-5500 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CANCE, William, G. [US/US]; 4010 SW 93rd Drive, Gainsville, FL 32608 (US). GOLUBOVSKAYA, Vita [US/US]; 3901 SW 98th Terrace, Gainsville, FL 32608 (US).

- (74) Agent: NELSON, Gregory, A.; Akerman Senterfitt, P.O. Box 3188, West Palm Beach, FL 33402-3188 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHODS AND COMPOSITIONS FOR INDUCING APOPTOSIS



(57) Abstract: The C-terminal domain of focal adhesion kinase (FAK-CD) was isolated using a Baculoviral system. Using phage display techniques, a phage encoding a 12 amino-acid peptide (peptide 35) and AV3 that binds to FAK-CD were identified. The peptides were also conjugated to TAT-FITC to produce a fluorescently labeled chimeric molecule capable of penetrating cell membranes. Contacting various breast cancer cell lines with these molecule caused detachment, rounding, apoptosis and cell death. These effects were not observed in normal (non-cancerous) breast cells.

WO 2005/049852 A2



Published:

 without international search report and to be republished upon receipt of that report For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.